Identify two potential topics, meeting the following specifications. Turn in your team’s responses to the questions below. Identify which is your preference. I will provide feedback on feasibility from my perspective and given my experience with course projects in introductory statistics courses. I will give my recommendation as to which I see being the better choice, potentially with modifications. I reserve the right to request an additional topic if I find neither feasible.

Identify two different questions, each of which could be examined using the study of a different population by way of sampling.

Make sure that both potential questions have these six properties:

1. The question is one that you and your teammates would be interested in studying in this course project.

2. You do not currently know the answer.

3. Data to answer the question do not currently exist in a data set (to the best of your knowledge and some initial searching online). (The intent is to gather fresh data.)

4. The question can be addressed using tools and concepts from our STA 2023 course.

5. The entire project can be done in approximately 25 hours per student.

6. You can take measurements of your variables on a random sample of at least 125 individuals (people, places, or things) from your population of interest.

Potential Topics Assignment: Answer these questions and submit your team’s responses.

1. a. What question do you propose to study?

b. What led you to propose this study?

2. a. Give the operational definition of an individual (person, place, or thing) in your study.

b. Describe the target population of individuals of interest by specifying the set of all N individuals, the location of this set in space and time, as well as the number N or estimate of N, the population size.

c. What variables do you propose to measure on each individual?

d. Consider where you would collect data and with whom, if anyone, you would be interacting, besides your teammates. What permissions need to be granted before data collection could take place?

3. Suppose you do this study.

a. Think about what you propose to measure. What knowledge about the population can you guarantee will be generated by this study?

b. Who might benefit from that knowledge? What benefit might they receive?

c. What steps must be taken and what changes must occur after the end of this study in order for this benefit to occur?